SECURITY OF THISM DOCUMENT NO. NO CHANGE IN CLASS. [] LI DECLASSIFIED
CLASS, CHANGED TO: TS S O SH 18 September 1953 50X1 MENORANDUM FOR THE RECERD REVIEWER: 037189 50X1 Projects: P-60B, P-93, P-103, SUBJECT: P-109, P-122, P-123, P-139 50X1 1. On 21 August 1953, of APD met with 50X1 50X1 to discuss the current projects. 50X1

- 2. Work on the fluid contact microphone project, P-109, has progressed to a point where we must supply more specific information and specifications before further progress can be made.
- a. Specifications on the transistor amplifier are required, including input and output impedance, frequency response, gain and power supply available to operate transducer. A model has been promised as soon as it is available.
- b. A sample of our present contact microphone was desired but it is considered so unsatisfactory as to be a poor standard of comparison.
- c. The microphone will consist of a sensing element and various types of mounts. The present mounts considered are for a flat panel and a pipe. The sensing element can be made with any impedance over a wide range. It is inherently capacitive but an inductor may be added to make it more resistive.
- 3. In order to decrease excessive bulk of the Control System catalog, P-103, it was agreed that the standard items of large, well-known manufacturers will not be included. Unusual items and items of lesser known manufacturers will be included.

| 4. It is desired by Indexing, P-103, be narrowed or give  | that the field of the Transducer on some definite bounds.     | 50X <sup>2</sup> |
|---|---|------------------|
| 5. wants more informato use with the Autocollimators they | ation on the source we intend<br>are reworking on P-60B. They | 50X1             |

to use with the Autocollimators they are reworking on P-60B. They stressed that the observer should be almost directly behind the source in order to see the autocollimator. His lateral displacement should be less than three feet per 1000 feet of range.

6. The cable

SECURITY BUSCAMATION

50X1 6. The cable decoding project was discussed with on 21 August 1953. More specific information is required 50X1 before a proposal can be submitted. a. What is the form of incoming information? Teletype tape would be preferable to printed characters because the tape would operate the machine automatically and hand-feeding of information would not be required. b. Is a microfilm reader all right? c. Is there any desire for translation to English? 50X1 7. The pending proposal for the investigation of covert underwater and underground communications systems was discussed at 50X1 on 21 August 1953 with 8. When asked for specification, it was stated that this was an unbounded investigation for methods of underground and underwater communications. 9. The following specifications were made: a. The desired range is I mile or greater. b. Underwater communications will be chiefly in fresh water. Neither party will be submerged in the water. c. Probes may be placed in the ground or water. d. Equipment portable. e. No restrictions regarding CN or voice. 50X1 is planning to submit a proposal for building a miniature pocket recorder to record 1/2 hour of voice. The recorder will be as simple as possible and the complexity will be in reproducer. 50X1 TSS/APD 50X1